

FIG. 1A

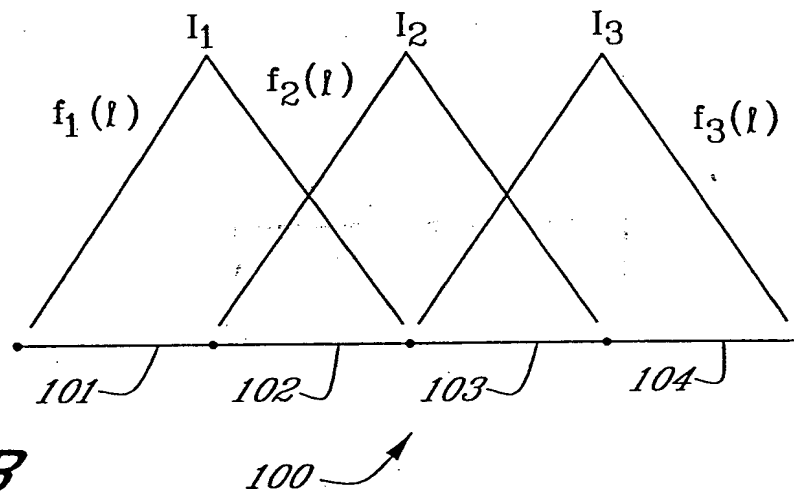


FIG. 1B

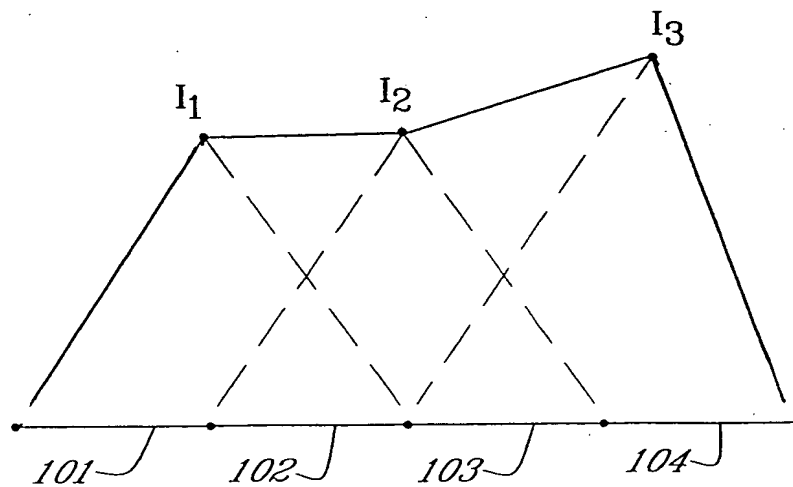


FIG. 1C

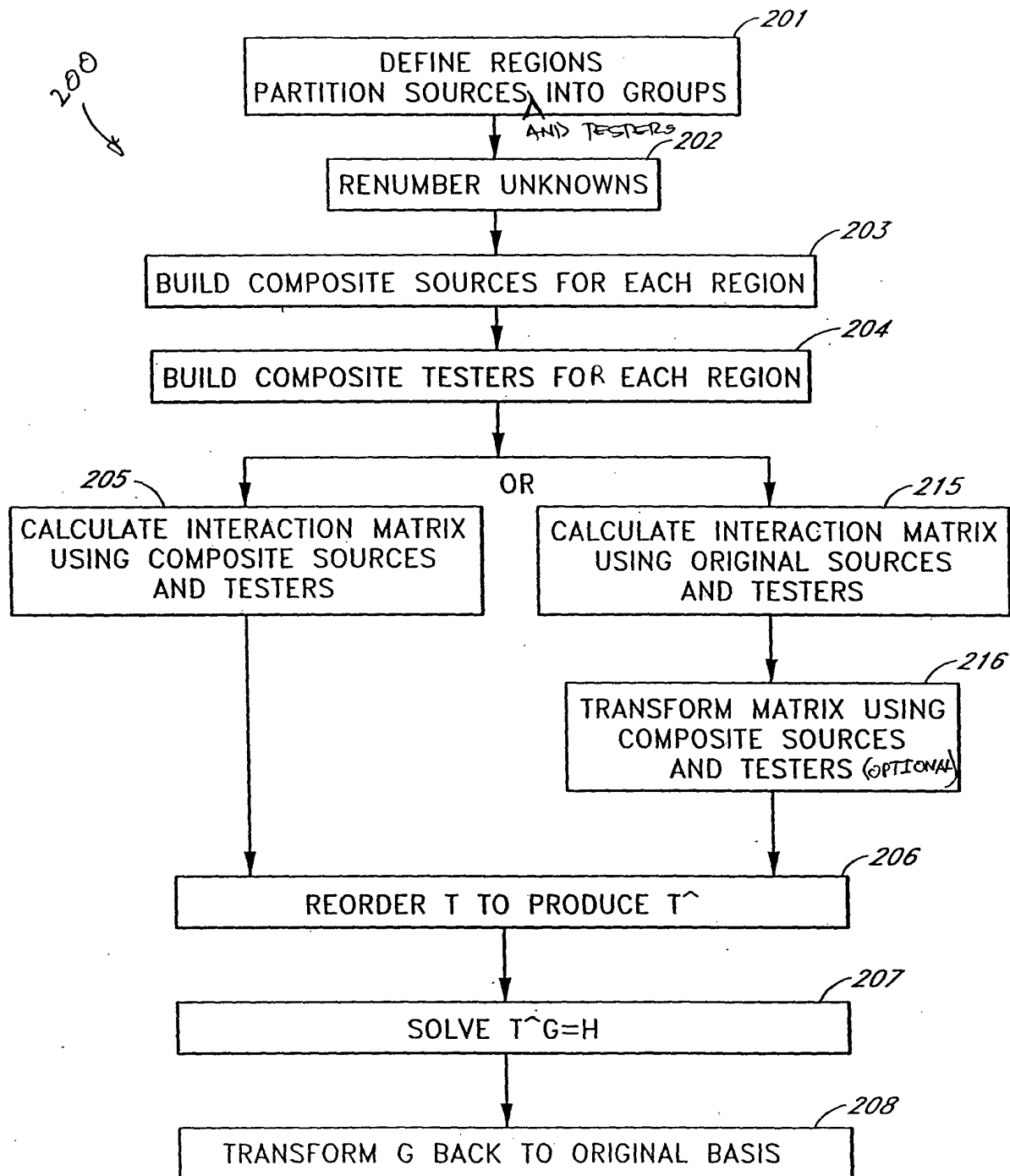


FIG. 2

SPARSE AND EFFICIENT BLOCK FACTORIZATION FOR  
INTERACTION DATA

Francis X. Canning

Appl. No.: Unknown Atty Docket: CANNING.001CP2

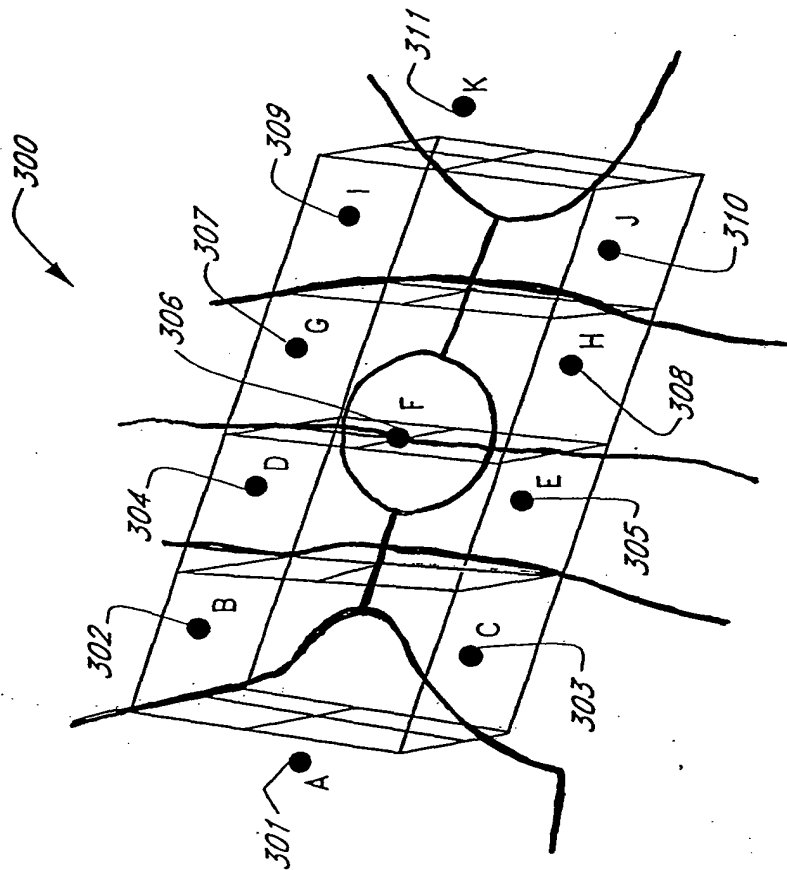


FIG. 3

SPARSE AND EFFICIENT BLOCK FACTORIZATION FOR  
INTERACTION DATA

Francis X. Canning

Appl. No.: Unknown

Atty Docket: CANNING.001CP2

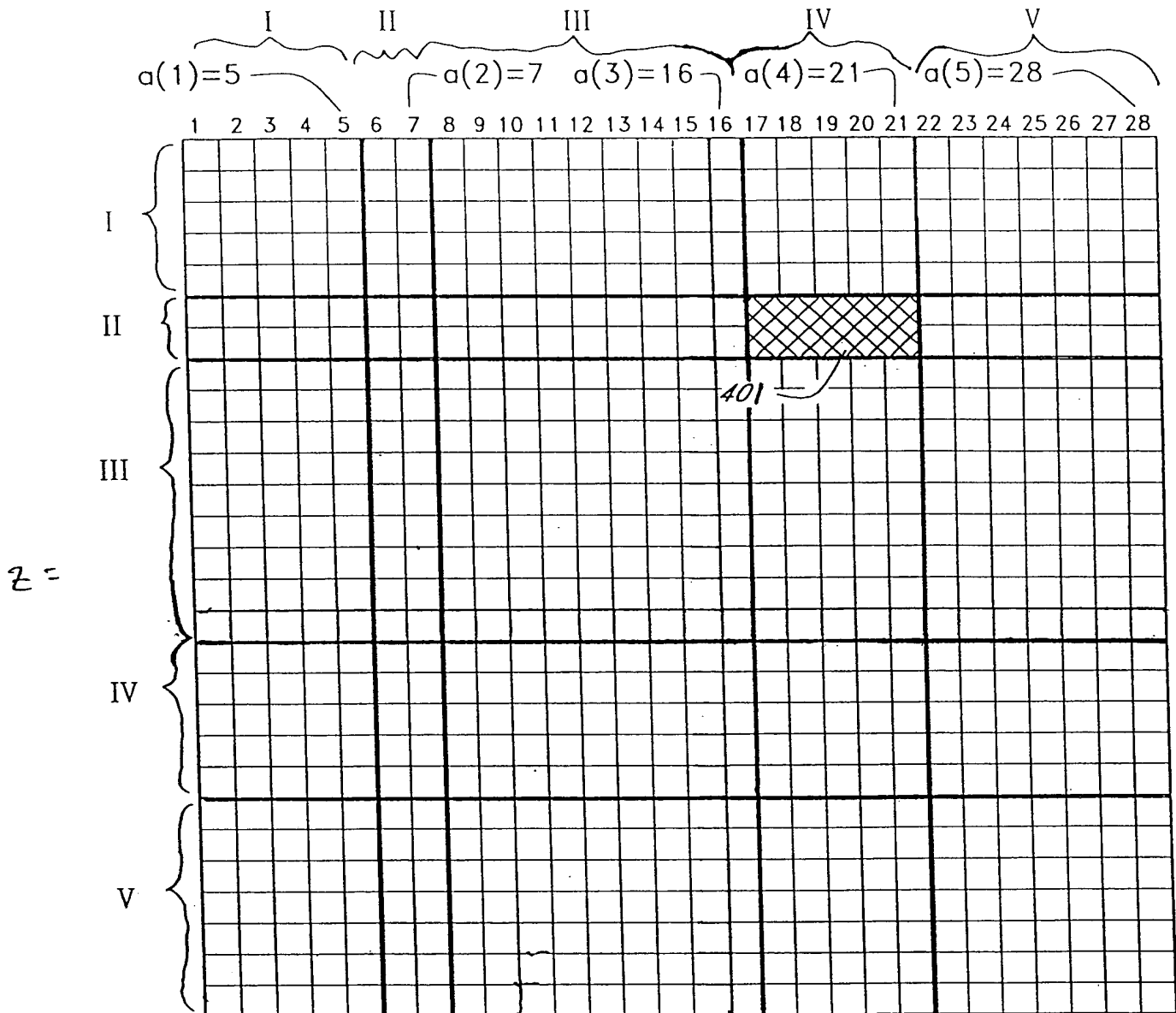


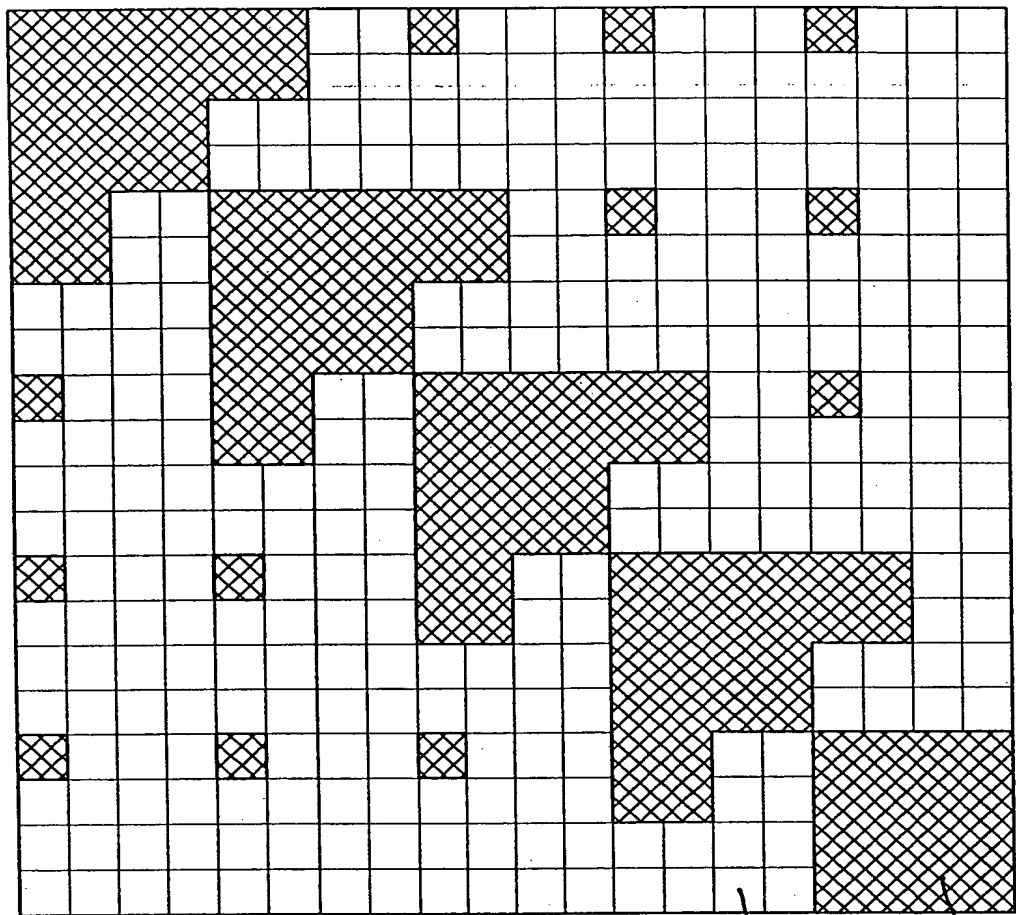
FIG. 4

SPARSE AND EFFICIENT BLOCK FACTORIZATION FOR  
INTERACTION DATA

Francis X. Canning

Appl. No.: Unknown

Atty Docket: CANNING.001CP2

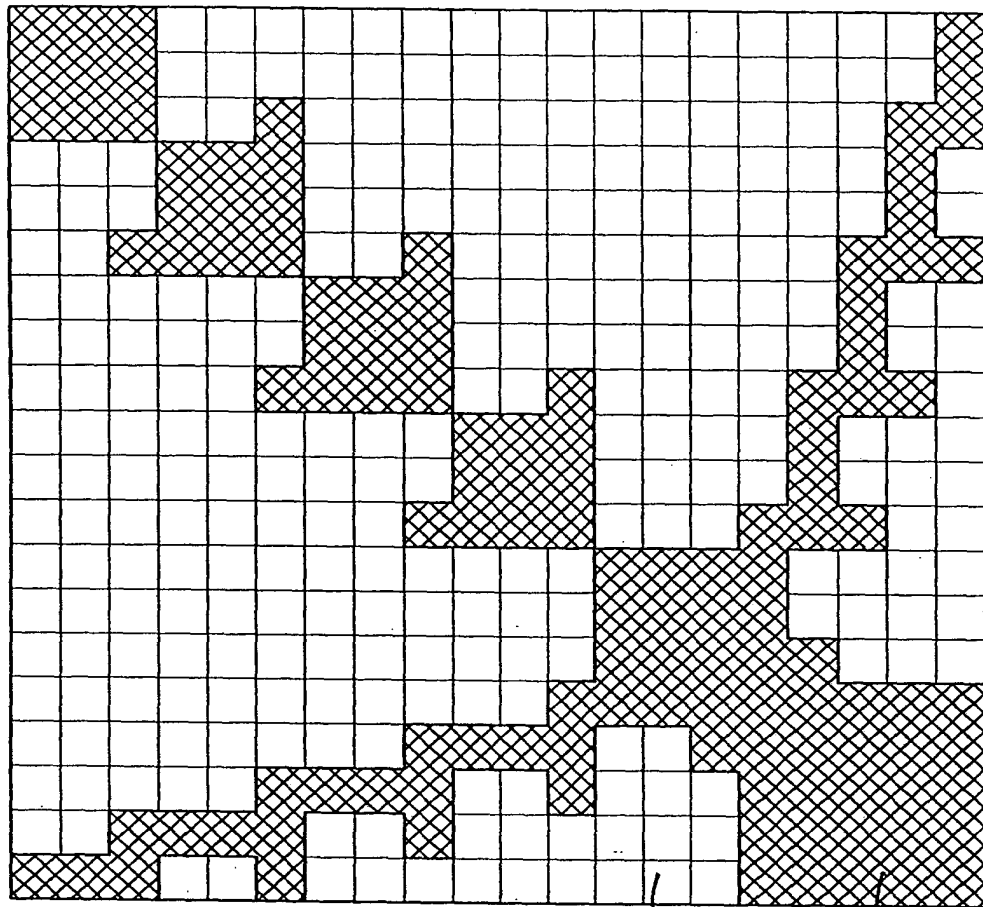


500 ↗

**FIG. 5**

501

502



600

FIG. 6

601

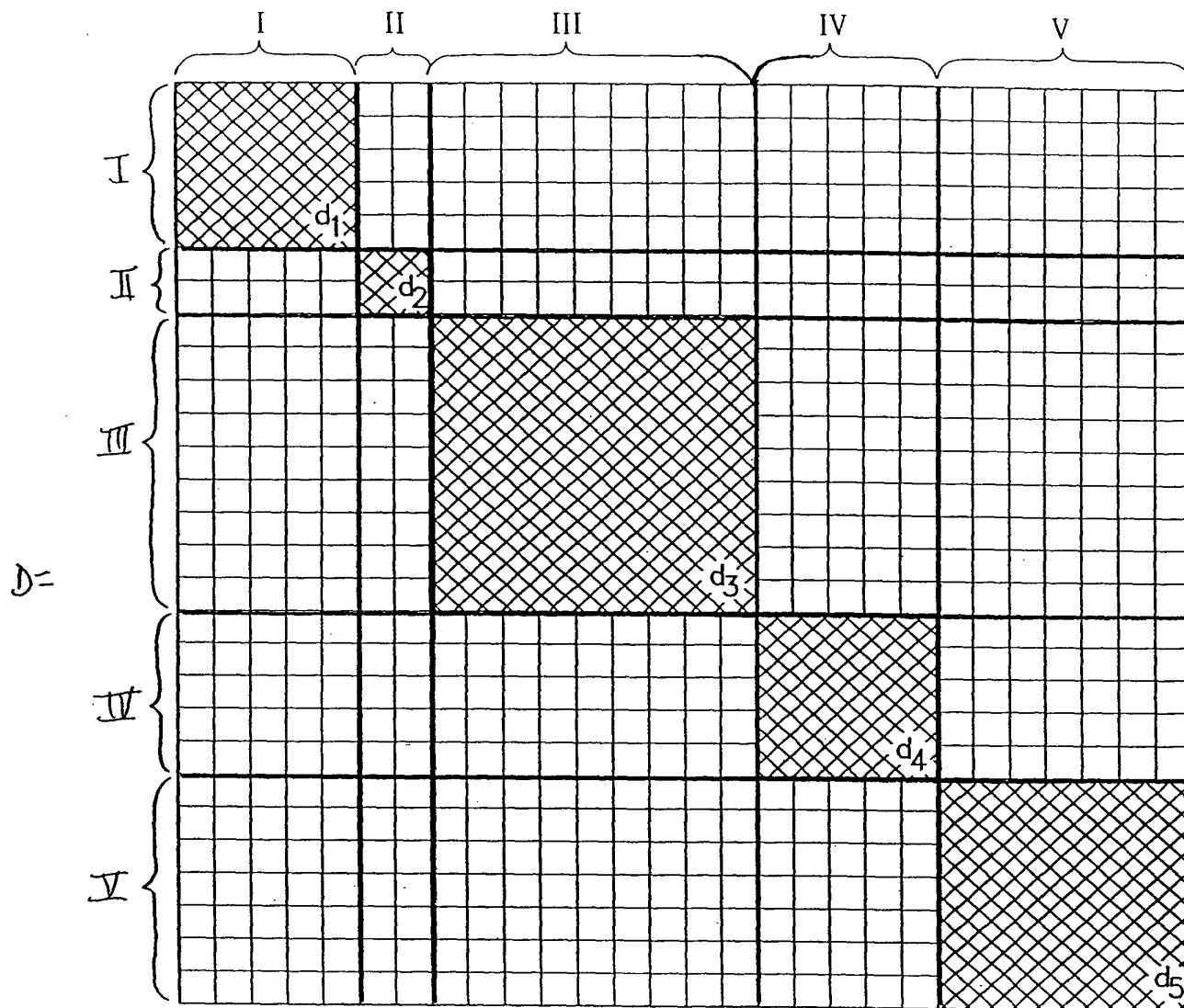
602

SPARSE AND EFFICIENT BLOCK FACTORIZATION FOR  
INTERACTION DATA

Francis X. Canning

Appl. No.: Unknown

Atty Docket: CANNING.001CP2



700 ↗

FIG. 7

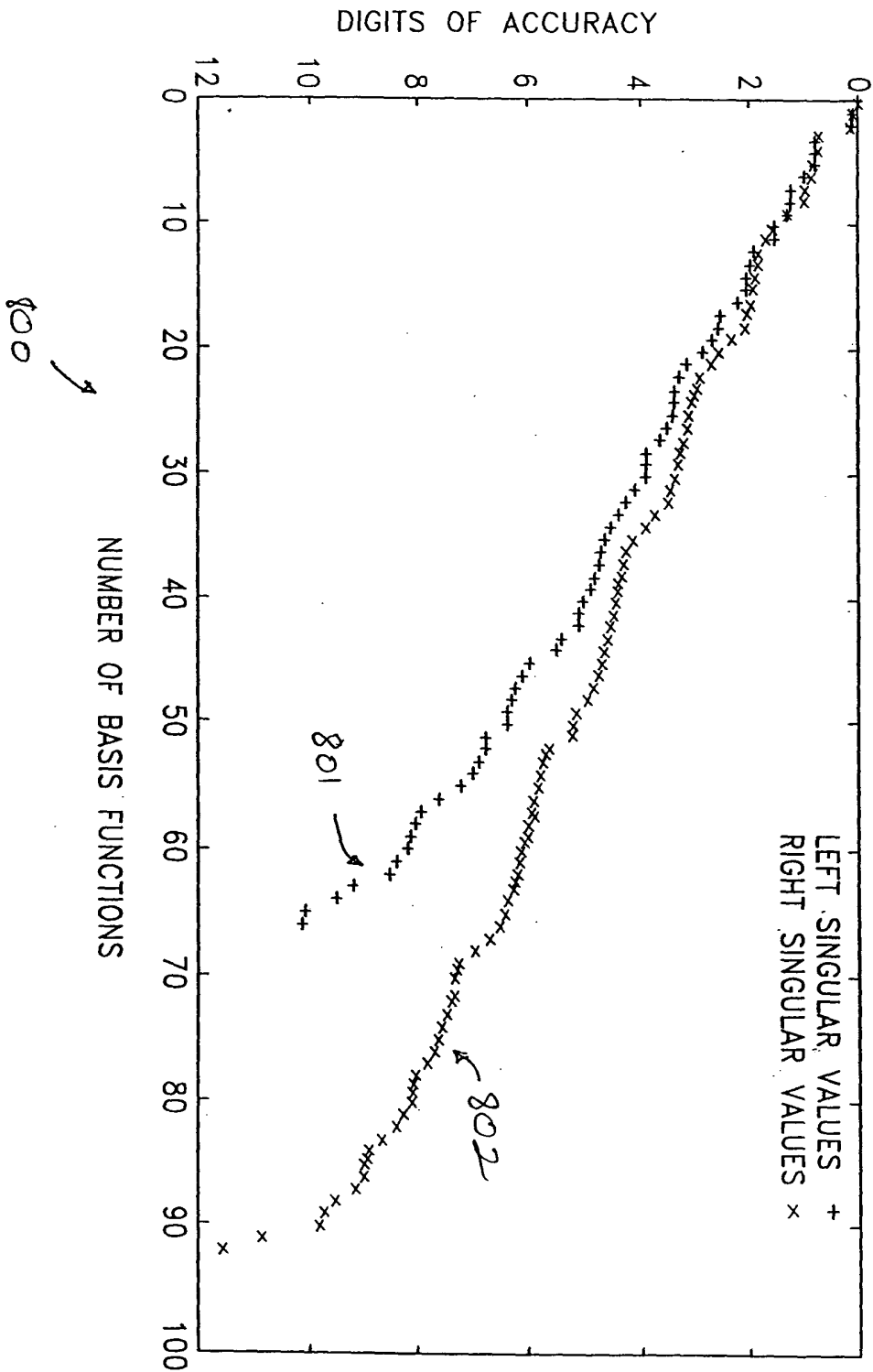


FIG. 8



SPARSE AND EFFICIENT BLOCK FACTORIZATION FOR  
INTERACTION DATA

Francis X. Canning

Appl. No.: Unknown

Atty Docket: CANNING.001CP2

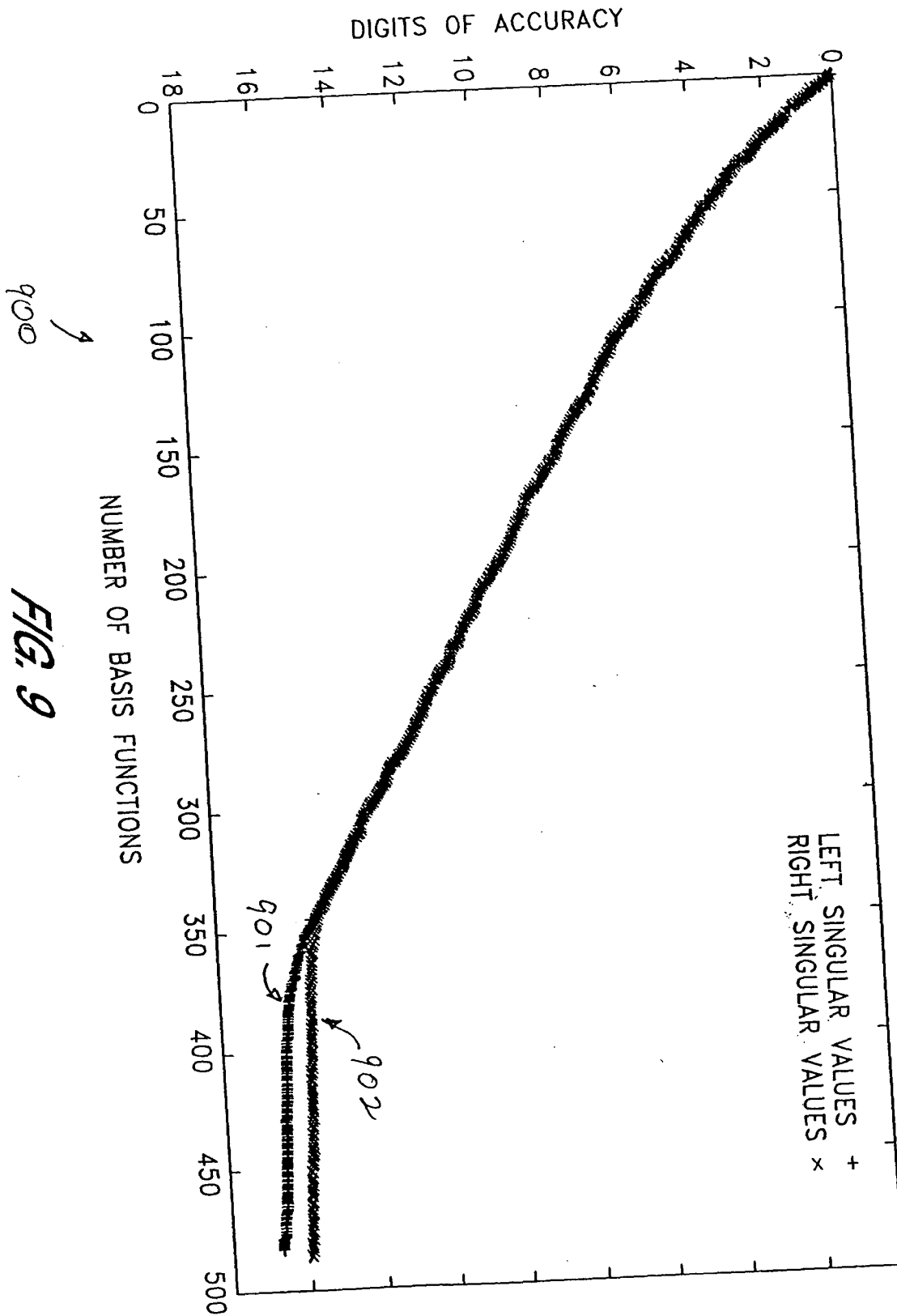


FIG. 9

10A  
10B

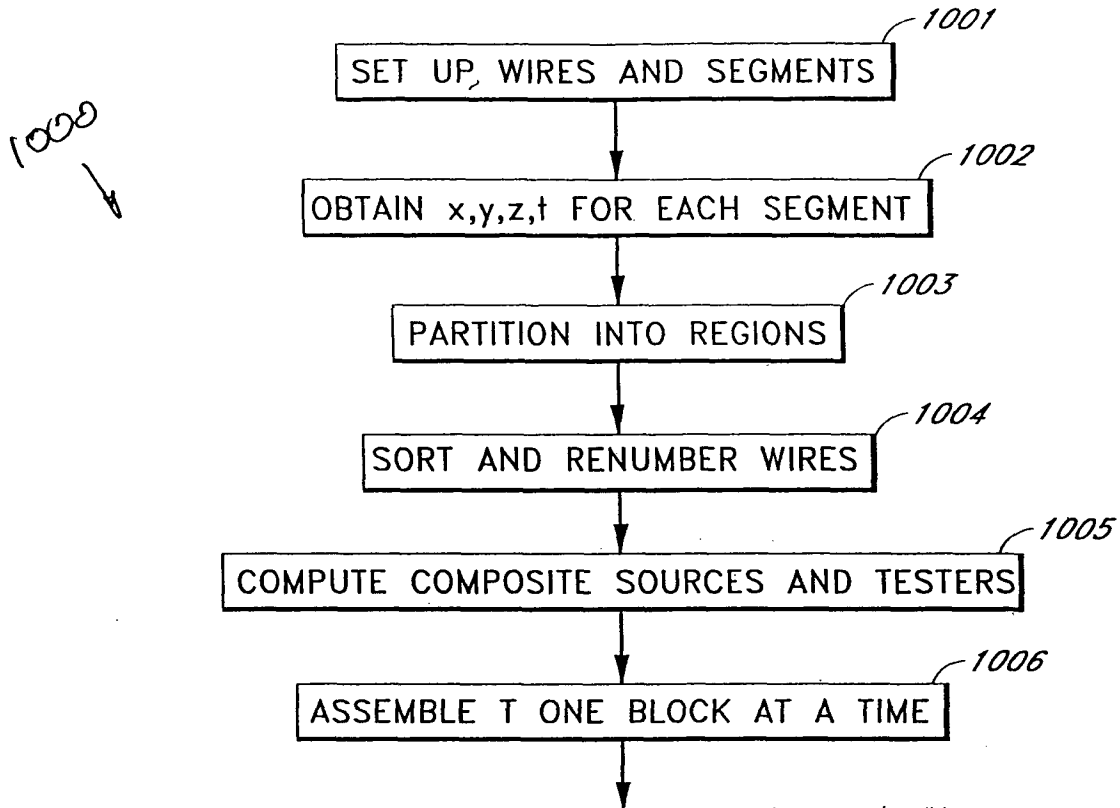
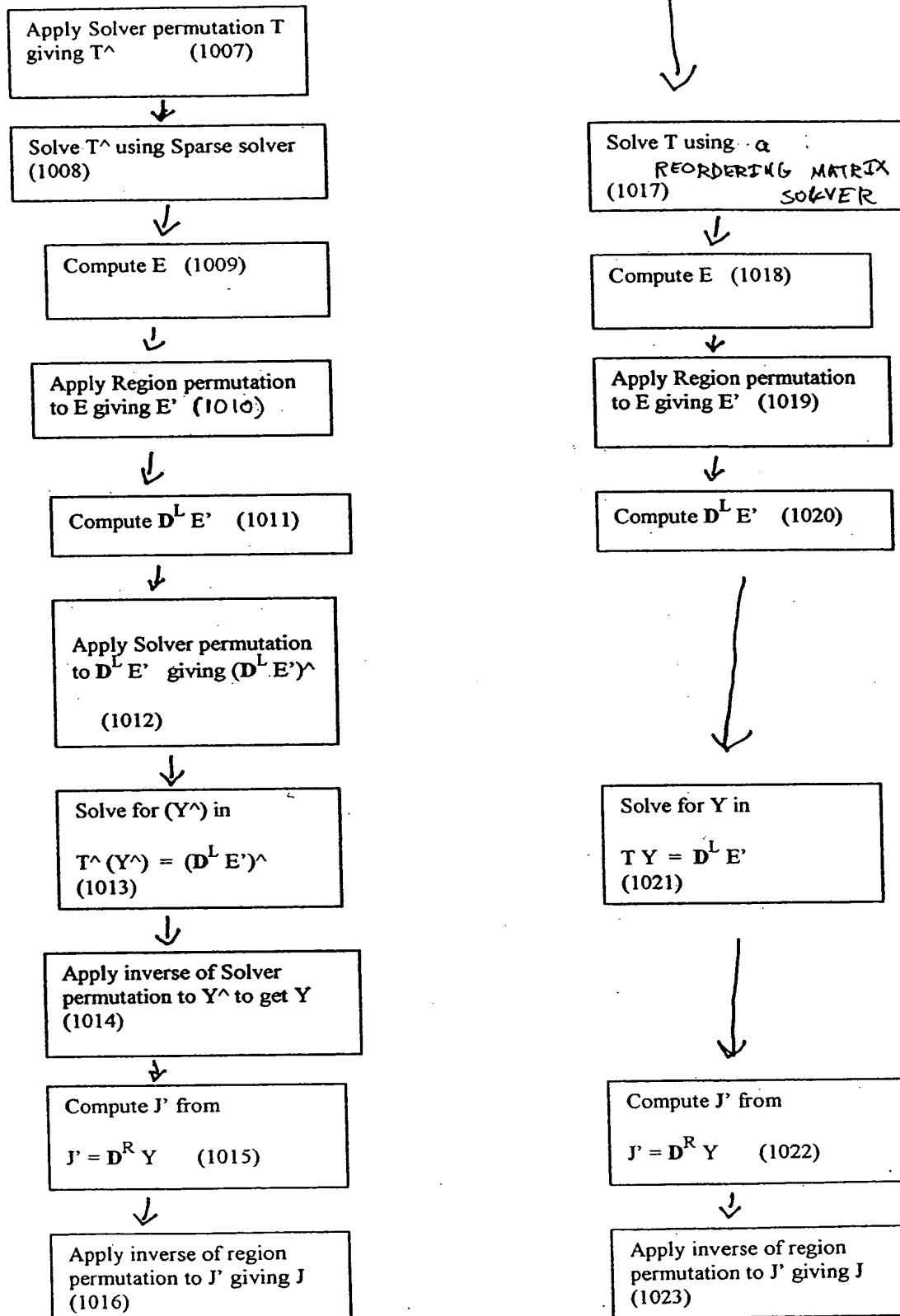


FIG. 10A

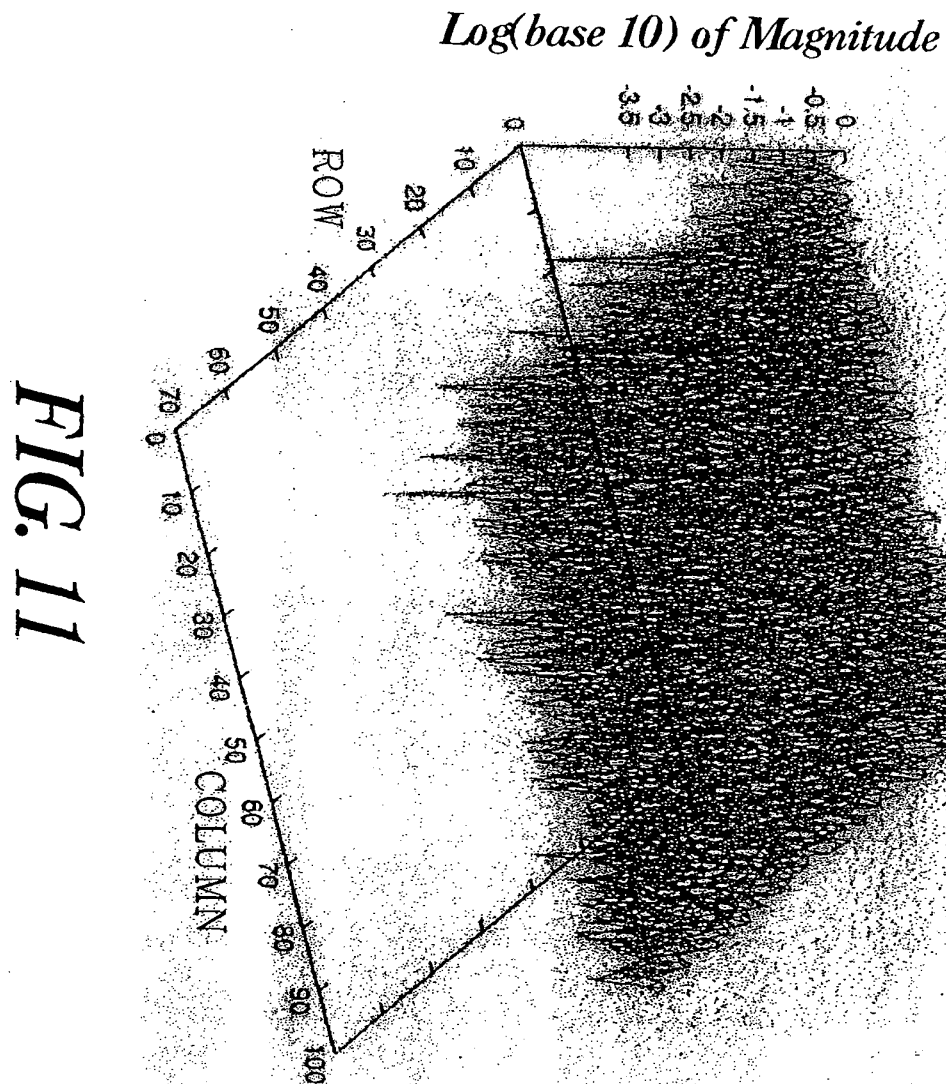


SPARSE AND EFFICIENT BLOCK FACTORIZATION FOR  
INTERACTION DATA

Francis X. Canning

Appl. No.: Unknown

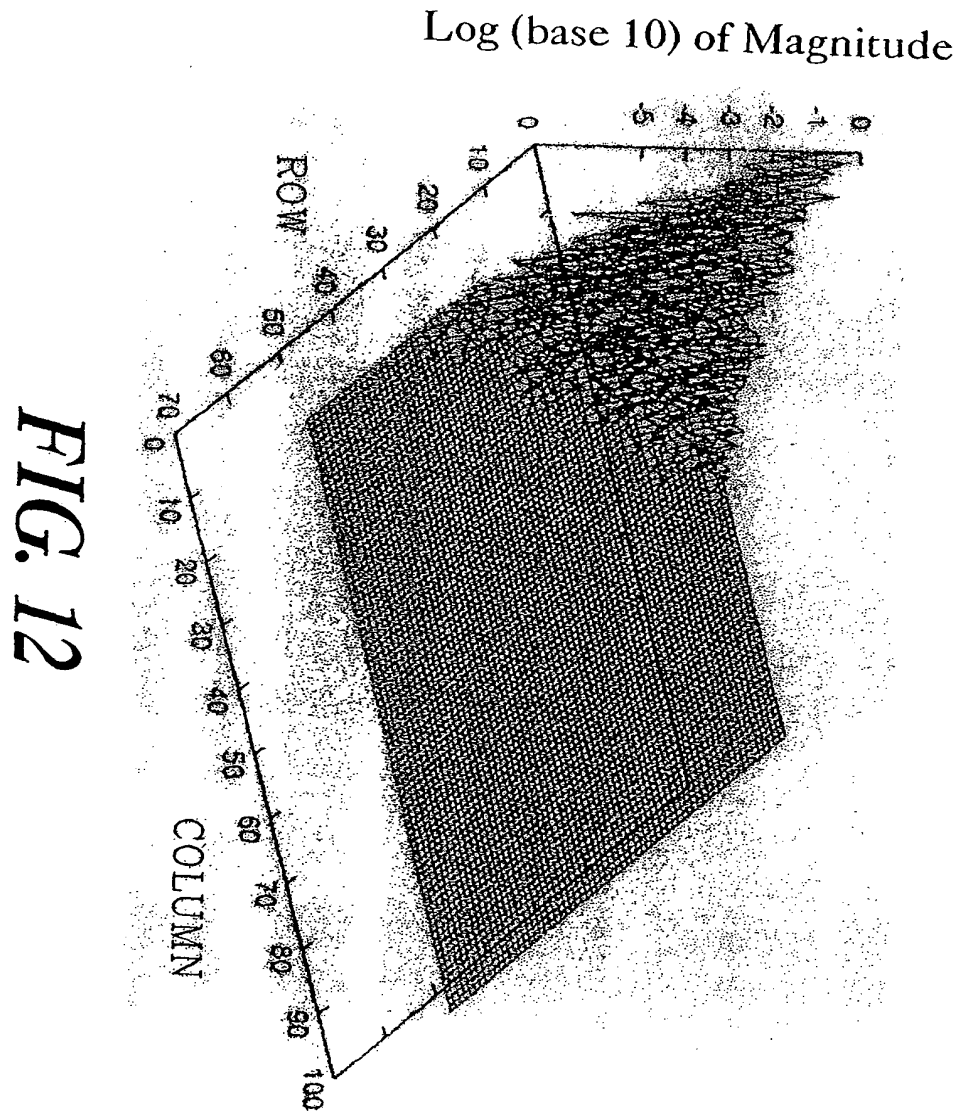
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INTERACTION DATA

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SPARSE AND EFFICIENT BLOCK FACTORIZATION FOR  
INTERACTION DATA


Francis X. Canning

Appl. No.: Unknown Atty Docket: CANNING.001CP2

$$\tilde{\mathbf{A}}_{i,j} = \begin{array}{|c|} \hline \blacksquare \\ \hline \end{array} \quad i > j$$

$$\mathbf{B}_{i,j} = \begin{array}{|c|} \hline \blacksquare \\ \hline \end{array} \quad i < j$$

$$\mathbf{B}_{j,j}^{-1} = \blacksquare$$

$$\mathbf{A}_{i,j} = \tilde{\mathbf{A}}_{i,j} \mathbf{B}_{j,j}^{-1} :$$


$$\mathbf{A}_{i,k} \mathbf{B}_{k,j} :$$

$i < k \quad k < j$

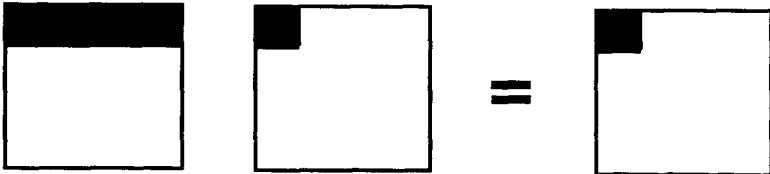


FIG 13

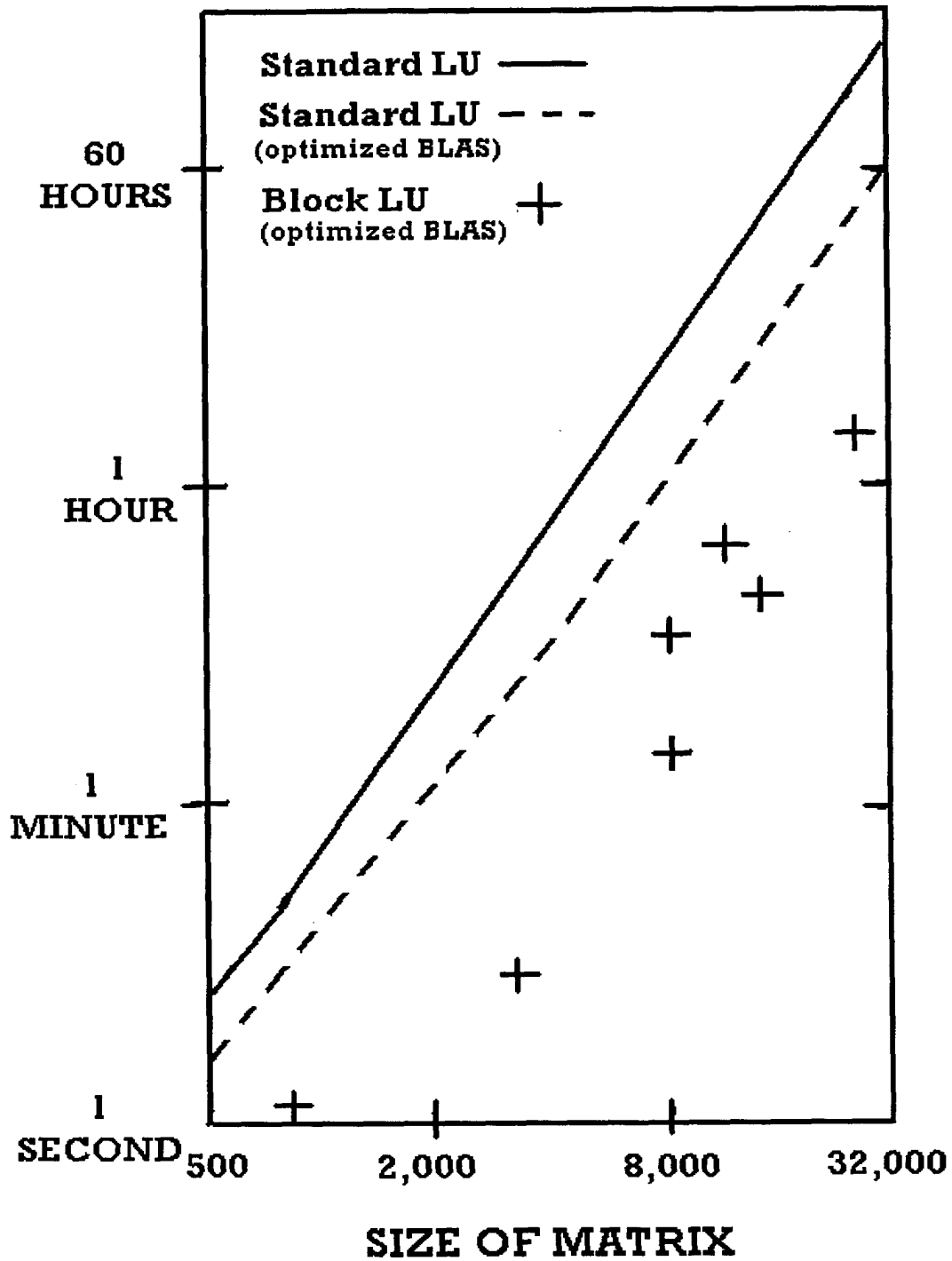


FIG 14